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April 20, 1993

Ms. Donna Searcy  
Secretary  
Federal Communications Commission  
1919 M Street, NW  
Washington, DC 20554

Re: Reply Comments on Notice of  
Proposed Rule Making,  
ET Docket No. 92-298

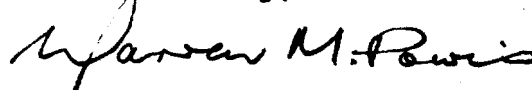
Dear Ms. Searcy:

Enclosed herewith are five copies (original and four) of the comments and audio tape (one for each copy of the comments) by this firm in the Notice of Proposed Rule Making, "Amendment of the Commission's Rules to Establish a Single AM Radio Stereophonic Transmitting Equipment Standard".

The audio tape provides recorded observations of AM stereo "platform motion" using a Potomac Instruments synthesized monitor receiver model SMR-11, Serial No. 293 with AMS-II C-Quam(r) stereo decoder and ANT-II tunable ferrite rod antenna.

If there are any questions, please do not hesitate to contact this office.

Sincerely,



Warren M. Powis  
Vice-President

WP:cc  
Encl.

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COHEN, DIPPELL AND EVERIST, P. C.

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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
  
Establishment of a Stereophonic )  
Transmitting Standard in the ) ET Docket No. 92-298  
Radio Broadcasting Service ) FCC 92-546

Reply Comments By  
Cohen, Dippell and Everist, P.C  
to Notice of Proposed Rule Making

**Introduction**

These comments are submitted by Cohen, Dippell and Everist, P.C. ("CDE"), Consulting Engineers, in response to comments filed in the above-captioned proceeding. CDE and its predecessors have practiced and represented the broadcast industry before the FCC since 1937. CDE has reviewed the numerous comments filed in this docket which seeks to adopt a single AM stereo standard, and submits its reply comments with a view to the Commission's selection of the superior system.

CDE is a professional consulting engineering firm. Its principals are registered professional engineers with memberships in the National Society of Professional Engineers (NSPE) and the Association of Federal Communications Consulting Engineers (AFCCE). CDE fully subscribes to the Canons of Ethics of these organizations. As such, it does not represent any manufacturers or their agents. CDE is concerned that the FCC does not prematurely adopt an inferior AM stereo system that could act as a millstone around the neck of an ailing AM broadcast industry. The technical superiority of the best system must outweigh other interests.

Alfred E. Resnick, P.E., of Capital Cities/ABC, Inc. stated:

"The competition for listeners that AM radio faces is not only FM, but CD and high quality cassette. The time has come to choose an AM stereo system on technical merits."

### Listening Tests

CDE agrees with comments by Capital Cities/ABC, Inc. that there are serious unanswered questions concerning the quality and superiority of the Motorola system.

CDE also filed comments in this docket and included cassette tapes of C-Quam AM stereo monitoring tests taken at five locations. Listening tests<sup>1/</sup> taken on Station WFMD, 930 kHz, Frederick, Maryland from approximately 2 minutes before sunset until 10 minutes after sunset exhibited a very annoying effect in the AM stereo mode. These tests were made at Site No. 1 described in the Comments previously filed by this office. A stereo cassette tape has been included with this filing which demonstrates the observed effect, also described by various commenters as "platform motion".<sup>2/</sup> [The listener may wish to use stereo headphones to properly hear the impact of this effect.] The measured daytime field strength of WFMD at Site Number 1 was approximately 5 mV/m and the postsunset field strength was approximately 2.5 mV/m at the time of the recordings taken in Fall, 1991.

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<sup>1/</sup>Observations were made using a Potomac Instruments synthesized monitor receiver Model SMR-11, Serial No. 293 with AMS-11 C-Quam(r) stereo decoder and ANT-11 tunable ferrite rod antenna.

<sup>2/</sup>See for example comments by Communications Technology, Paragraph 21.

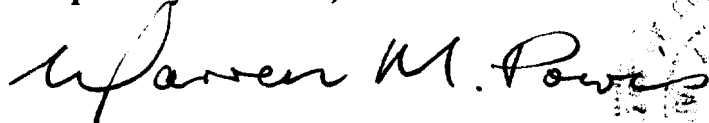
CDE supports the commentors who observed that adjacent channel rejection of AM receivers has been attained at the expense of strictly limiting the desired channel bandwidth and thus severely restricting the audio fidelity (bandwidth). It is no wonder that the public dislikes the muffled signals which are created from within the AM portion of their receivers. A major

various test measurements, and "aural" evaluations<sup>4/</sup> can be made by expert listeners using music, speech, audio tones, etc.

Over 10 years have passed since the Commission adopted its decision for a marketplace selection of an AM stereo standard. Broadcast technology has advanced tremendously since that time. CDE urges the Commission to provide a window of opportunity for proponents to improve and/or replace their systems prior to thorough engineering testing and evaluation by an independent laboratory. Following system tests, the Commission should adopt the technically superior system as the AM stereo standard. To do otherwise will be a disservice to the American (and ultimately the worldwide) public.

CDE also urges the Commission to adopt recommended stereo AM receiver standards which include minimum bandwidths capable of fully receiving the transmitted signals.

Respectfully Submitted,



Warren M. Powis, P.E.  
Vice-President

DATE: April 20, 1993

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<sup>4/</sup>Including but not limited to carrier offset susceptibilities, variable skywave interference effects, and adaptability of existing stereo exciters to the Kahn or other systems.